



SECTION SF 30 BLOCK 14 CONTINUATION PAGE

**SUMMARY OF CHANGES**

SECTION 00800 - SPECIAL CONTRACT REQUIREMENTS

The following have been added by full text:

AMENDMENT #4

**Amendment No. 4**

**IFB No. W912DS-05-B-0010**

**Maintenance Dredging- Arthur Kill Reach of the NY & NJ Channels**

Bids to be opened on 21 June 2005 at 2:00 PM

This amendment is issued for the following reasons:

Add the Continuing Contract Clause

Add the "Dredging Equipment Monitoring" Section

**Continuing Contract Clause**

The Continuing Contract Clause has been added by full text to Section 00800 of the specifications.

**Dredging Equipment Monitoring**

The dredging equipment monitoring requirement has been added to the specification as Section 02900 by full text.

All other terms and conditions remain the same.

**The following have been added by full text:**

**SECTION 00800**

**52.232-5001 CONTINUING CONTRACTS (MAR 1995)—EFARS**

(a) This is a continuing contract, as authorized by Section 10 of the River and Harbor Act of September 22, 1922 (33 U.S. Code 621). The payment of some portion of the contract price is dependent upon reservations of funds from future appropriations, and from future contribution to the project having one or more non-federal project sponsors. The responsibilities of the Government are limited by this clause notwithstanding any contrary provision of the "Payments to Contractor" clause or any other clause of this contract.

(b) The sum of \$1,000 has been reserved for this contract and is available for payments to the contractor during the current fiscal year. It is expected that Congress will make appropriations for future fiscal years from which additional funds together with funds provided by one or more non-federal project sponsors will be reserved for this contract.

(c) Failure to make payments in excess of the amount currently reserved, or that may be reserved from time to time, shall not entitle the contractor to a price adjustment under the terms of this contract except as specifically provided in paragraphs (f) and (i) below. No such failure shall constitute a breach of this contract, except that this provision shall not bar a breach-of-contract action if an amount finally determined to be due as a termination allowance remains unpaid for one year due solely to a failure to reserve sufficient additional funds therefore.

(d) The Government may at any time reserve additional funds for payments under the contract if there are funds available for such purpose. The contracting officer will promptly notify the contractor of any additional funds reserved for the contract by issuing an administrative modification to the contract.

(e) If earnings will be such that funds reserved for the contract will be exhausted before the end of any fiscal year, the contractor shall give written notice to the contracting officer of the estimated date of exhaustion and the amount of additional funds which will be needed to meet payments due or to become due under the contract during that fiscal year. This notice shall be given not less than 45 nor more than 60 days prior to the estimated date of exhaustion.

(f) No payments will be made after exhaustion of funds except to the extent that additional funds are reserved for the contract. The contractor shall be entitled to simple interest on any payment that the contracting officer determines was actually earned under the terms of the contract and would have been made except for exhaustion of funds. Interest shall be computed from the time such payment would otherwise have been made until actually or constructively made, and shall be at the rate established by the Secretary of the Treasury

pursuant to Public Law 92-41, 85 STAT 97, as in effect on the first day of the delay in such payment.

(g) Any suspension, delay, or interruption of work arising from exhaustion or anticipated exhaustion of funds shall not constitute a breach of this contract and shall not entitle the contractor to any price adjustment under the "Suspension of Work" clause or in any other manner under this contract.

(h) An equitable adjustment in performance time shall be made for any increase in the time required for performance of any part of the work arising from exhaustion of funds or the reasonable anticipation of exhaustion of funds.

(i) If, upon the expiration of sixty (60) days after the beginning of the fiscal year following an exhaustion of funds, the Government has failed to reserve sufficient additional funds to cover payments otherwise due, the contractor, by written notice delivered to the contracting officer at any time before such additional funds are reserved, may elect to treat his right to proceed with the work as having been terminated. Such a termination shall be considered a termination for the convenience of the Government.

(j) If at any time it becomes apparent that the funds reserved for any fiscal year are in excess of the funds required to meet all payments due or to become due the contractor because of work performed and to be performed under the contract during the fiscal year, the Government reserves the right, after notice to the contractor, to reduce said reservation by the amount of such excess.

(End of clause)

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## **SECTION 02900 DREDGING EQUIPMENT MONITORING**

### **1 Scow monitoring equipment, software, and website**

The contractor is required, at his/her own expense, to have all scows or other vessels used to transport dredged material to designated placement locations (HARS, artificial reefs, and upland or other locations in the New York Bight or Lower Bay) equipped with scow monitoring equipment and software, through a contractor (i.e. scow monitoring contractor) not owned or affiliated with the dredging company. Scow monitoring equipment must be installed on any scow used to transport dredged material prior to ANY dredged material being placed in the scow. All scow monitoring data collection must begin prior to ANY dredged material being placed in the scow.

The following specifications are associated with and required for the scow monitoring equipment, software, and website:

- A self-contained "black box" unit must be installed on all scows, and must be capable of recording on a 24-hour basis, latitude and longitude positions of the scow, through DGPS technology, and scow draft, using a water pressure sensor, at variable sampling rates ranging from one position and draft value every 6 seconds to one position and draft value every ten minutes, according to NY District requirements.
- Any tugs used to transport dredged material to designated locations (HARS, artificial reefs, and/or upland or other locations in the New York Bight or Lower Bay) and all dredges used on the project must be equipped with satellite real-time tracking and messaging system maintained by the scow monitoring contractor.
- Primary Scow Monitoring systems, consisting of laptop computers with scow monitoring software, onboard all tugs used to transport dredged material, must allow data, being collected by the "black box" units on the scows being towed, to be viewed in real-time by U.S. Army Corps of Engineers, New York District certified, Inspectors of Open Water Placement of Dredged Material (NYD Inspectors) and by towing vessel crew members when used for offshore placement trips. Primary Scow Monitoring system data must be automatically transmitted from upland scows to the dredge for storage and additional transmission to the scow monitoring contractor's computer for posting on the scow monitoring website.
- Backup Scow Monitoring system, used for offshore placement trips, consisting of laptop computers with scow monitoring software, onboard all tugs used to transport dredged material, must allow the DGPS position of the tug to be viewed on the computer screen, along with an estimated position of the scow based on the towing distance and angular offset of the scow from the course line of the tug.
- Laptop computer scow monitoring software must also include an electronic version of the Transportation and Placement Log Form (TPLF) to be completed by the NYD Inspector during each placement trip.
- Laptop computer scow monitoring software must also include an electronic checklist (described in Section 4.1) for completion by the NYD Inspector.
- Laptop computer scow monitoring software must also include map displays with selectable scales that allow NYD Inspectors to view the New York Harbor area and New York Bight, HARS and reef placement sites, and designated placement grids and coordinates. The scow monitoring software must graphically display placement grids developed for the project and allow viewing of the position of the towing vessel and scow throughout the placement trip.
- Laptop computer scow monitoring software must also include links to websites that allow NOAA offshore buoy data to be viewed in real-time, along with the latest marine weather forecasts.

- Laptop computer scow monitoring software must allow real-time plotting of scow bin-level measurements, draft and speed, to be used to monitor potential scow leakage
- Laptop computer scow monitoring software must allow downloading of digital camera photos for inclusion with placement trip data.
- Laptop computer scow monitoring software must allow collection of towing vessel fathometer data for inclusion with other placement trip data.
- Laptop computer scow monitoring software must allow transmission, at the end of each placement trip, of electronic TPLFs, checklists, scow position, speed, bin-level measurement data, draft data, fathometer data, and digital photos, to a website described below.
- A website must will be maintained by the scow monitoring contractor and include the following capabilities:
  - Automatically assign trip numbers to scow monitoring software installed on laptop computers via wireless communication technology.
  - Scow monitoring data, TPLFs, checklists, digital photos, and all other data collected by the scow monitoring equipment and software must be posted within two hours of NYD Inspector submission of the data from the laptop computer.
  - A dredging production database that reports the following per trip: trip number, date of trip, dredge used, tug used, scow used, trip destination, estimated scow volume, and the time taken for the following - scow loading, scow de-watering, scow transit, scow unloading, dredged material disposal from the scow, return trip from the placement site and scow idleness, as applicable. The dredging production database will also include a map of the dredging site that is updated after the completion of each trip with the location of where dredged material from each scow-loading event occurred.
  - A placement grid cell management tool that reports the following per grid cell: total scow placements, total estimated volume of dredged material in the cell resulting from scow placements, the trip numbers for the scow placement events that occurred within the cell. The placement grid cell management tool must also have the capability for the NY District to enable, disable, and set the number of maximum scow placement events within placement grid cells.
  - Submission of automatic emails, notifying NY District and contractor personnel when TPL checklist items are marked "No" for trips. These automatic emails will also be recorded on the website in a TPL checklist database that lists the electronic checklist cumulative "No" results for the duration of the project. This database must be designed so that data queries can be done by dredged material placement locations, tug used, scow used, NYD inspectors and date range.

- Submission of automatic emails, notifying NY District and contractor personnel of potential misplaced dredge material events and/or potentially leaking scows, based on computer analysis of placement trip data. These automatic emails will also be recorded on the website in an emails alarms database, which includes the following: trip number, scow used, alarm type, date sent and project name. This database must be designed so that data queries can be done by alarm type and date range.
- Allow positions of all dredge plants and all tugs used in the project, as monitored by the satellite tracking system, to be viewed in real-time, or as soon as satellite data transmission permits. The satellite tracking system must also have the capability to send messages to tugs for the purpose of communicating with inspectors when they are out of cell phone range.
- Bathymetric plots based on tug fathometer data.
- Computer modeling of rock placement at artificial reefs using the NY District ROCDMP model.
- Plotting of summary maps of placements made to date
- Capability of plotting individual or multiple placement trips at variable scales.
- Provide a maintenance log of remote-access and on-site service visits related to hardware/software installation and/or repairs.

**Additionally**, in support of the scow monitoring equipment and software, the contractor must ensure the following:

- Towing vessel fathometers must have digital data output that is compatible with scow monitoring laptop computers and software
- Towing vessels must have fax machines capable of sending fax messages while at sea, and must be able to transmit when vessels are in the vicinity of the Ambrose Channel. The scow monitoring contractor must be provided full access to all tugs and scows used on the project, as required to service scow monitoring equipment and/or software.
- The scow monitoring software/equipment shall be programmed by scow monitoring contractor personnel for use aboard any towing, or other, vessels used to transport dredged material.
- The contractor shall ensure that the scow monitoring equipment is

operational 24 hours each day, at all times dredged material is being loaded at dredging sites, transported from dredging sites, and while returning to dredging sites after ocean placement, and when returning from upland facilities.

- The contractor is required to provide the scow monitoring contractor with a scow loading table for each scow used to transport dredged material to upland facilities and ocean placement locations, that includes the range of possible scow drafts associated with the range of possible mass of material contained in each scow.

- Although the NYD Inspector will observe the operation of the scow monitoring equipment and software associated with ocean placement trips, operation and maintenance of all scow monitoring equipment and software will be the responsibility of the dredging contractor, through a contract with the scow monitoring contractor. It is the contractor's responsibility to ensure that the scow monitoring equipment is in a continuous, operable condition at all times. Scow monitoring equipment and software must be approved by NY District prior to use. Monitoring data provided by the scow monitoring system must be compatible with data collected during previous NY District dredging projects and in particular, be compatible with monitoring data maintained on the NY District DAN-NY system. If NY District has not previously observed the operation of scow monitoring equipment and software proposed for use by the contractor, satisfactory demonstration of the equipment and software must be performed prior to approval by NY District. Such approval must be made no sooner than 14 days prior to the start of dredging.

**Scows used to transport dredged material to upland facilities are required to have one acoustic bin-level sensor installed in addition to the scow draft sensor. The bin level sensor must be integrated with the Primary Scow Monitoring System to include bin level data with the data provided by the DGPS receiver and scow draft sensor. NYD certified Inspectors are not required to be present on tugs used when transporting scows loaded with dredged material for upland treatment/placement, however, NY District may require an independent observer to accompany each upland placement trip and to verify data associated with each upland placement trip.**

Any problems with operation/function of the scow monitoring software and/or equipment should be directed to the scow monitoring contractor immediately, and to the NY District at (212) 264-1585 or x1853.

To ensure proper communication of the scow monitoring components on the tug and scow, the same tug used to transport a scow loaded with dredged material toward a designated ocean placement location must continue to be used until placement has occurred. Switching of tugs once a placement trip has begun must not occur unless a mechanical problem or other unforeseen problem prevents the use of the tug for ocean placement. If such switching is required the scow monitoring contractor must be notified to ensure proper operations of the scow monitoring equipment and software.

## **2. NYD Inspectors.**

The Contractor at his/her own expense shall have the USACE New York District (NYD) certified Inspector(s) of Open Water Disposal of Dredged Material (NYD Inspector) oversee the



placement activities of all dredged materials at the HARS and/or any other ocean placement location, if used. A list of NYD Inspectors may be obtained from the NYD Operations Division, Dredged Material Management Section. Only Inspectors on the list may be used during the project. NYD Inspectors must complete USACE Transportation and Placement Log Forms (TPLFs)

and checklists for all placement activities performed. Inspectors will be required to be awake and on duty and in the towing vessel wheelhouse, to observe scow monitoring equipment function, watch for endangered species, and perform other Inspector duties, from the time the towing vessel departs from the dredging site until the scow has completely emptied and all reporting requirements have been completed. NYD Inspectors will be responsible for ensuring that the requirements contained in these specifications, and any other guidance and requirements provided to the contractor related to dredged material placement, are met. NYD Inspectors will help ensure that placement guidelines, particularly as presented during the pre-construction meeting, and described below, are being followed.

a. A list of NYD Inspectors can be obtained from the USACE Ocean Placement Manager, Dr. Stephen Knowles, at (917) 790-8538. Fourteen (14) days prior to departure of the first project vessel from port for open water placement of any dredged material, the Contractor must submit a letter to the New York District with the names and certification information of all NYD Inspectors who will be working on the project. The Contractor must furnish NYD Inspector names, companies NYD Inspectors are affiliated with if not independent NYD Inspectors, and the expected duration of employment of NYD Inspectors who will begin service at the start of the project. NYD Inspectors who will be on duty at the beginning of the dredging project must be present at the pre-construction meeting to review placement guidelines and requirements associated with this project. Any NYD Inspectors who begin duty after the first day of dredging must meet with NY District personnel to review placement guidelines and requirements associated with this project prior to working as a NYD Inspector on the project. Notice of replacement NYD Inspectors must be submitted to NY District at least two weeks prior to beginning work, unless illness of a NYD Inspector or other unforeseen event prevents such notification. The Contractor must furnish NYD Inspector names, companies NYD Inspectors are affiliated with if not independent NYD Inspectors, and the expected duration of employment of replacement NYD Inspectors who will work on the project.

b. NYD Inspectors are not allowed to be on duty for more than twelve (12) hours per day. NYD Inspectors must be provided a minimum of eight (8) hours of continuous off-duty time each day to allow appropriate rest to ensure safety and competence. NYD Inspectors must be provided with a designated bunk space or other suitable sleeping location while working aboard a towing vessel and a suitable location for completing paperwork associated with NYD Inspector duties. The contractor is not permitted to direct the NYD Inspector in completion of NYD Inspector duties/requirements unless specifically requested by NY District. Although NYD Inspectors are financially employed by the Contractor, either directly or through sub-contracting, NYD Inspector duties and requirements are established by NY District. NY District will be responsible for determining whether NYD Inspectors are satisfactorily performing their duties and

requirements. NYD Inspector's who do not fulfill their contractual requirement will be removed from the project by the Contract Officer or Contract Officer Representative (COR)

c. The following items, provisions, accommodations, and supplies must be provided for the use of each NYD Inspector working on the dredging contract:

- Legible copy of the permit or contract specifications, as related to scow loading, transport, and dredged material placement;
- A legible copy of the Placement Guidelines and placement grid map received at the pre-construction meeting, or any additional instructions or guidelines as related to scow loading, transport, and dredged material placement;
- an 8" - 12" wide protractor with degrees printed or embossed on the curved surface;
- dividers for scaling distances off of maps and charts;
- scow loading tables for each scow used to transport dredged material;
- a fully operational, handheld laser range finder with a range of at least 1000 feet, and manufactured no earlier than 2001, must be available for use by the NYD Inspector at any time. Spare batteries for the laser range finder must be available at all times;
- access to the towing vessel DGPS, fathometer, and radar;
- fully operable personal cellphones in possession of each NYD Inspector at all times with active phone numbers unique to each phone available for placing and receiving calls at all times. Cell phone numbers must be provided to NY District at the pre-construction meeting;
- a fully operational fax machine must be onboard the towing vessel for use by the NYD Inspector within 2 hours of each placement event at the HARS, or within 4 hours of placement at an artificial reef.
- Any discrepancies or other concerns noted by the NYD Inspector regarding placement activities must be reported immediately, via cellular phone from the tug, to the NY District Operations Division (Alex Gregory, 917-790-8427) and a Dredging Contractor representative not onboard the towing vessel, and, if the issue is related to the scow monitoring equipment, the scow monitoring contractor. These contacts are referred to as the "Notification List". Additional items related to the duties of the NYD Inspector may be required at any time during the period of the dredging contract.

**3.0** NYD Inspectors are not authorized to operate towing vessel equipment, and in particular, remotely operated scow control equipment. NYD Inspectors are required to use hand-held laser range finders (required to be aboard all towing vessels used for dredged material placement) to determine the tow lengths used at the time of dredged material placement. NYD Inspectors are required to communicate with the towing vessel crew to obtain information necessary to document the position of the scow at the time placement occurs. In the event of scow monitoring equipment/software malfunction, the NYD Inspector must complete a map of the placement area showing the position of the scow at the time scow doors were first opened, including the distance from the towing vessel to the scow (as determined using the hand-held laser range finder), the towing vessel DGPS position at the time of initial scow door opening, the vessel direction of travel, and the bearing to the scow from the towing vessel. Manually prepared maps, if necessary, associated with an ocean placement trip, should also be faxed to NY District with the TPLF and other required documents. If TPLFs (electronically or manually produced) and any other required placement

documents are not received within **2 hours** of each placement event, scows may be directed to standby at the dredging site until all items have been received at NY District. TPLFs and other paperwork associated with placement trips to artificial reefs must be received within 4 hours of placement.

### **3.1 Digital Photography of Loaded Scows**

Each scow loaded with dredged material must be clearly photographed with a working digital camera by the NYD Inspector after loading, prior to transport away from the dredging site. Flash photography must be used if darkness or other conditions require supplemental illumination. The contractor will be responsible for ensuring that sufficient lighting is provided, as required, such that the digital photographs taken by NYD Inspectors clearly show the type of dredged material within the loaded scows, regardless of weather conditions or time of day. At least one photograph is required, however, additional photographs may be required to document the characteristics of the dredged material, and the condition of the scow. The minimum resolution required for each photograph is 1200 x 1600 pixels. Digital cameras used for the photography must be capable of both wide and narrow angle photographs. Photographs must be digitally imprinted with the date and time of each photograph, the trip number, and the scow identification. Each clearly visible digital photograph, taken by NYD Inspectors, of every loaded scow prior to it leaving the dredging site, must be submitted to with the other scow monitoring data (TPL form, checklist, etc.) for posting on the scow monitoring website.

### **3.2 Specific Placement Grid Details And Additional Placement Guidelines**

More detailed placement guidelines and specific placement grid information will be provided prior to commencement of dredging, particularly at a pre-construction meeting of the dredging contractor and Corps. Additional placement guidelines and modifications may be provided to the dredging contractor at any time during the dredging contract.

### **3.3 Dredged material placement meeting**

A meeting will be held at the NY District Operations Division conference room no earlier than 15 days before dredging begins, and no later than 7 days before dredging begins, to discuss the placement guidelines and other aspects of dredged material placement and monitoring. Representatives from the dredging contractor must include the project manager, dredging equipment operator, towing vessel captains, NY District certified Inspectors, a representative of the scow monitoring contractor, members of the NY District Operations Division associated with dredged material placement and monitoring activities, and others invited by the contractor or NY District. The day and time of the meeting will be at the discretion of the NY District Operations Division and must be coordinated by the dredging contractor at least one week before the day of the meeting.

## **4.0 General Requirements: ALL PLACEMENT ACTIVITIES MUST BE RECORDED, AND REQUIREMENTS ADHERED TO, AS SPECIFIED BELOW.**

a. Twenty four (24) hours prior to departure of the first project vessel from port for the open water placement of any dredged material, the Contractor must notify the New York District

USACE by telephone. Calls regarding departures must be made to the Dredged Material Management Section at (917) 790-8538 or x8427. The Contractor must furnish the Contractor name, project name, Inspector name and estimated time of departure.

b. The Contracting Officer, or his Representative, reserves the right to have Corps of Engineers and/or Environmental Protection Agency employees and other invited representatives accompany all trips to the placement site to observe placement activities and/or certify compliance with any contract specifications or environmental regulations.

c. The Contracting Officer, or his authorized Representative, must give notice of sailing by telephone, or via direct radio transmission between the Contractor's tug and the US Coast Guard two hours prior to departure of a vessel from port. Telephone calls must be made to (718) 354-4088.

d. NYD Inspectors must submit reports of all placement activities authorized by this contract on the basis of one report for each scow of dredged material within 2 hours after each placement event.

In addition to the TPLF, a checklist must be completed for each ocean placement trip. Any items receiving a "NO" answer are considered discrepancies and must be reported immediately to the Notification List. Discrepancies that must be noted by the NYD Inspector on the TPL form and checklist and must be reported immediately to the Notification List include, but are not limited to, the following items

- A scow has a mechanical problem, a leak, or visible damage that may cause leaking.
- A scow contains more than the maximum volume allowed for placement during a single trip.
- A scow has a noticeable list
- A trail of leaking dredged material is visible behind the scow
- A scow monitoring system (Primary or Secondary) is not functioning properly
- Fathometer, radar, vessel DGPS, and any other equipment/information necessary to conduct NYD Inspector duties are not present or are not fully functional.
- Scow draft pressure varies more than 20 points, or 1.5 feet of draft, from the value at the dredge site.
- A gradual increase or decrease in scow draft pressure values, exceeding 12 points (or actual scow draft of more than 1 foot) is observed.
- Any water depths observed anywhere within an artificial reef boundary within 15 feet of the permitted water depth at the reef, or within 15 feet of a depth specified by NY District.
- Placement occurred in the incorrect grid cell
- Any placement outside of the designated placement grid, including locations within the HARS, the HARS Buffer Zone, shipwreck Buffer Zones, the HARS No-Discharge Zone, and all areas outside of the HARS.
- Any placement outside of the designated artificial reef boundary

NYD Inspectors should check each item as appropriate, at the dredging site, while underway to the placement location, during placement, and following placement. Copies of the checklist must be completed by NYD Inspectors during each placement trip, signed and dated by the NYD

Inspector, and submitted to the NY District on a weekly basis. Any discrepancies must be recorded on the TPLF or a separate report. Separate reports must include the name of the NYD Inspector, the date and time of the incident, and a detailed description of any discrepancy. These supplemental reports must be submitted at the same time TPLFs are submitted.

e. Contractor must receive grid coordinates for the placement location at the HARS before dredging starts; usually at the pre-construction meeting. Individual grid cells may be as small as 100 feet wide and 200 feet long. Placement must be made while towing scows in the direction of the longest grid cell dimension, unless otherwise directed by the NY District. All placement events must be recorded and signed by the master of the tow. Copies must be submitted to the U.S. Coast Guard no later than the fourth day after each week of activity. The Coast Guard address is:

Captain of the Port of New York  
212 Coast Guard Drive  
Staten Island, New York 10305

f. Every vessel engaged in the transportation of dredged material must have its name or number, and owner's name, painted in letters and numbers at least fourteen (14) inches high, on both port and starboard sides of the vessel. These names and numbers must be kept distinctly legible at all times, and vessels not so marked, cannot be used to transport or dump dredged material

#### **4.1 Placement of Dredged Material Suitable for Ocean Disposal, General:**

a. A National Marine Fisheries Services-approved Observer, at the Contractor's expense, must be aboard the tug transporting a loaded scow to the ocean placement sites. The observer will have the responsibility for determining the presence of endangered species (sea turtles and whales) during transit to, and upon arrival at the location for all placement activities. Upon arrival at the placement site, placement of dredged material may occur only if no specimens of endangered species are observed to be present within a 0.25 nautical mile of the placement site. If endangered species are observed to be present within 0.25 nautical mile of the designated placement location, then the placement of dredged material must not occur. Placement of the dredged material may occur only when the observed animals have moved outside the 0.25 nautical mile zone around the designated placement location, or have completely departed the site. In all such cases where whales or sea turtles have been encountered, the observer must submit a written report incorporating the following information: animal type (Whale or sea turtle); the specific species (if known); the date, time and location of the sighting (latitude, longitude); approximate distance away from the vessel and scow/barge; number of individuals observed; behavior (feeding, nursing, migrating, etc.,). If a NYD Inspector is to be used for this function, he/she should possess or acquire, prior to the initiation of the project, valid certification from the National Marine Fisheries Service or other accredited agency of training on techniques for identifying species, and preparing applicable reports for instances where endangered species are encountered. Twenty-one (21) days prior to departure of the first project vessel from port for open water placement of any dredged material, the Contractor must submit a letter to the New York District with the names and certification information of all

NMFS Observers who will be working on the project. The Contractor must furnish Observer names, companies Observers are affiliated with if not independent Observers, and the expected duration of employment of Observers who will begin service at the start of the project. NYD Inspectors who are also NMFS Observers may fulfill the duties of both positions.

b. The towing vessel captain and the NYD Inspector must jointly determine and agree, prior to the departure of the towing vessel from the dredging site, that the forecasted weather and sea conditions at the expected time of placement of dredged material within the HARS or artificial reef site will:

- 1) allow for the safeguard of personnel and property during the towing operation and full release of material from the scow at the designated location and
- 2) not result in a loss of dredged material from the scow due to waves breaking in the scow.

If weather/sea conditions will not permit placement of dredged material at the designated grid cell, the scow must not be towed from the dredging site until conditions improve and allow safe and accurate dredged material placement.

c. The distance between the towing vessel and the placement scow when placing the dredged material must be noted by the NYD Inspectors on the TPL form used to document each trip. A hand-held laser range finder, manufactured no earlier than 1998 and rated to measure accurate distance to at least 1000 yards, must be aboard each towing vessel for use in determining the distance between the towing vessel and placement scow.

d. DGPS navigation and fathometer equipment must be present and fully operational on board the towing vessel and must be calibrated periodically in accordance with the manufacturer's guidelines. The instrumentation must also conform to current industry standards. Re-calibration of the instrumentation will be required in instances where major modifications to the towing vessel have been made. Specific documentation certifying the accuracy of instruments may be requested by the USACE. Fixed aids to navigation, with known latitude-longitude coordinates, should be used periodically to double-check the accuracy of navigation equipment. Likewise, locations with a known depth and stable bottom should be used to periodically double-check accuracy of fathometers.

f. Scows may not be transported from the dredging site for offshore placement of dredged material unless the tugs DGPS navigation system, scow monitoring equipment and software, tug fathometer, hand-held laser

range finder, scow radio-control system (if used), digital camera, and backup radio on scow (if scowman is used) are all in full working order and provide correct information. However, if scow monitoring contractor personnel are servicing/repairing the primary scow monitoring equipment, the backup scow monitoring equipment may be used, and an affected scow may be transported for ocean placement. The backup scow monitoring equipment must only be used on two consecutive placement trips of a scow. The backup scow monitoring equipment and software is an emergency backup to the primary scow monitoring equipment and must not be routinely used.

#### **4.2 Protocol for Placement of Dredged Material at Open Water Sites:**

To help ensure proper placement of dredged material at the Historic Area Remediation Site (HARS), the following placement protocol must be followed:

When NYD Inspectors place the notification telephone calls, they must state their name, the dredging project they are serving as a NYD Inspector on, the name of the towing vessel, the date, the time, and a brief description of the checklist item and the reason for the "NO" answer(s) for any checklist items.

a. Prior to leaving the dredging site, scows must be inspected to ensure correct operation of mechanical features. Scows must also be inspected for the presence of any conditions that may cause navigation problems. The scow radio-control system (if used on the project) and the Primary and Backup systems must be inspected for correct operation. A hand-held laser range finder, with a range of at least 1000 feet, manufactured no earlier than 2001, must be carried aboard each towing vessel. Hand-held laser range finders must be tested prior to departure from the dredge site. If any problems with the scow, radio-control system, Primary and Backup scow monitoring systems, video camera, or laser range finder, are encountered, corrections must be made before offshore transport of the scow may proceed, except when scow monitoring contractor personnel are onboard or attempting to fix a scow monitoring problem, in which case placement would proceed using the Backup scow monitoring equipment. However, the backup scow monitoring equipment/software must not be used on more than two consecutive placement trips.

b. Scows must be inspected for the presence of any conditions that may cause potential leakage. Prior to loading an empty scow at the dredging site, the empty scow must be inspected for presence of large dents or visible holes. Any holes must be repaired prior to placing any dredged material in the scow. Dents must be closely examined to ensure that a hole is not present, or that the hull strength is not compromised. The juncture of the two split hulls, when the scow is closed, must form a straight line and the rubber gasket must form a tight seal. Damage to the rubber seal or juncture must be repaired prior to loading the scow. Scow draft/pressure values at the dredging site at the time the scow is towed away for open-water placement must be recorded on the TPL form by the NYD Inspector. Scow draft/pressure values must also be recorded 30 minutes after departing the dredge site. Scow draft/pressure values at the designated placement location, just prior to scow door opening, must also be recorded on the TPL form by the NYD Inspector.

c. Scows must be observed for potential leaking of dredged material, as

indicated by visible turbidity plumes (muddier water) behind the scow, or significant change in the scow draft (more than 1.5 feet). The scow draft pressure values, or actual draft values displayed by the scow monitoring software, at the start of the trip and just before scow opening, must be recorded on the TPLF for every trip, regardless of the values or variability. Scows exhibiting draft changes of more than one foot may be leaking. A gradual increase or decrease in scow draft of more than one foot may indicate leakage, and must be noted on the TPLF, and also must be reported to the Notification List immediately. If the scow has not reached the Verazanno Narrows bridge, the scow must be towed back to the dredging site to determine the cause of the change in draft. If the scow is seaward of the Verazanno Narrows bridge, the scow may be transported to the designated placement location. In this case, the scow draft should continue to be highly scrutinized for the possible need for emergency procedures. If a situation arises that requires emergency dumping of dredged material, all reasonable efforts to dump outside of navigation channels must be made. Steady, gradual changes in scow draft may also indicate that dredged material is leaking from the scow, or water is leaking into the scow's hull. If gradual draft changes appear to occur regularly, the scow must be examined to determine if a leak is present.

d. After ensuring that all inspections have been performed at the dredging site, and compliance with all provisions and guidelines associated with scow loading and use has been met, scows must be brought to the designated grid cell, or coordinates, of the HARS, or other designated placement location, using the DGPS navigation systems of the tugboat and the scow monitoring software onboard the tugboat. Placement in the appropriate location, and scow draft immediately prior to scow door opening, must be documented by the NYD Inspector using the scow monitoring software while the scow position and draft information are monitored automatically by the scow monitoring system. Scows should be towed no faster than 2 knots, unless weather/sea conditions require higher speed to maintain safe and reliable navigation. Lengths of toelines should be no longer than 200 feet, unless weather/sea conditions require longer tow lengths to maintain safe and reliable navigation. Regardless of the conditions at the time of placement, tow lines must not be longer than 500 feet at the time of placement. NYD Inspectors must measure the distance from the towing vessel to the scow at the time of placement using the hand-held laser range finder and record the value on the TPL form. During each trip to the HARS and/or reef, the dredged material contained in a scow must be able to be placed within individual grid cells as small as 100 feet wide and 200 feet long. Dredged material must never be placed outside of designated grid areas of the HARS or artificial reefs.

e. If the Primary scow monitoring equipment/software does not show reliable DGPS coordinates in the vicinity of the designated placement grid or other designated placement location, or is not functional, the Backup scow monitoring equipment/software must be used to locate the placement site and estimate the scow position during placement. Length of toelines must be measured using the hand-held laser range finder. The bearing to the scow from the towing vessel must also be noted at the time of placement. Tow lengths must be less than 200 feet unless ocean/weather conditions require longer lines for safe navigation. Vessel navigation must be maintained in the direction of the maximum grid dimension for all placements, to the greatest extent possible. The angular displacement of the scow from the towing vessel course (track line) must be estimated by sighting the scow behind the towing vessel while holding a protractor with



the 90 mark pointing directly behind the towing vessel in line with the vessel track line(wake). A pencil must then be used to point at the scow, to the left or right of the 90 mark, to determine the angular displacement off of the towing vessel track line, recorded as degrees to the left or right when sighting the scow, rounded to the nearest 5. Scows directly behind the tug would be reported at 0 angular displacement. (a scow displaced 10 to the left of the 90 mark on the protractor would be reported as 10 left, etc.) This angle must be recorded on the TPL form, along with the following information if this option is used:

- 1) Coordinates of the tug at the start and end of placement
- 2) Length of tow line (distance from tug stern to scow bow)
- 3) Angular displacement of scow from trackline of tug
- 4) Estimate of lateral displacement of scow from the towing vessel trackline
- 5) Estimated longitude and latitude of scow at time of door opening and closing

The lateral displacement may be estimated by the following formula (for angular displacements up to 20):

displacement = towlength x sine of angular displacement

The following values of sine may be used:

5 degrees of angular displacement - sine = 0.087

10 degrees of angular displacement - sine = 0.174

15 degrees of angular displacement - sine = 0.259

20 degrees of angular displacement - sine = 0.342

For example, when using a 200 foot towlength, a scow is observed to track 15 degrees to the right of the tug trackline. The estimated displacement of the scow is  
 $200 \text{ feet} \times 0.259 = 52 \text{ feet}$

This means that when plotting the scow position on a map of the placement area, the scow would be plotted ~50 feet to the right and ~200 feet behind the position of the tug. The errors in estimating increase with longer towlengths. Because of this, it is critical to maintain as short a towlength as possible if the Backup scow monitoring equipment/software or tug's DGPS navigation system is used for placement. Perimeter grid cells are not permitted for use if Primary scow monitoring equipment/software is not functioning. The closest adjacent grid cell toward the center of the grid must be used.

f. If neither the Primary nor Backup scow monitoring equipment/software show reliable DGPS coordinates in the vicinity of the designated placement grid or other designated placement location, or is not functional, or weather/sea conditions prevent reliable maneuvering of the scow, the tugboat DGPS must be used to position the scow at the center of the grid, or other backup location in the grid as specified by NY District. Length of towlines must be measured using the hand-held laser range finder. The bearing to the scow from the towing vessel must also be noted at the time of placement. Tow lengths must be less than 200 feet unless ocean/weather conditions require longer lines for safe navigation. The angular displacement of the scow from the towing vessel course (track line) must be estimated by sighting the scow behind the towing vessel while holding a protractor. This angle must be recorded on the TPL form, along with the following information if this option is used:

- 1) coordinates of the tug at the start and end of placement

- 2) length of tow line (distance from tug stern to scow bow)
- 3) angular displacement of scow from trackline of tug
- 4) estimate of lateral displacement of scow from the towing vessel trackline
- 5) estimated longitude and latitude of scow at time of door opening and closing

g. If weather and/or sea conditions prevent reliable measurement of towing distance using the hand-held laser range finder, the towing vessel's radar must be used to determine the distance and bearing to the scow.

h. If neither the Primary nor Backup scow monitoring systems, nor the tugboat DGPS systems, provide navigation coordinates, the scow must be brought to a suitable location for correction of navigation problems. Placement of dredged material is not allowed if a reliable DGPS system is not providing coordinates at the time of scow door opening.

i. The grid center, or other backup placement location, will only be used if steps (d) and (e) are attempted without success, or when inclement weather/sea conditions prevent reliable maneuvering of the scow. The grid center should not be used if inclement weather conditions persist. Placement at the grid center is an emergency procedure. Regardless of the size of the grid, the scow must be towed with a length of towline such that, at the time of placement, both the scow and towing vessel are both within the grid boundary. If the Primary scow monitoring system fails after leaving the dredging site, the scow must not be used again until a fully operational Primary scow monitoring system is installed. However, if scow monitoring contractor personnel are onboard or on their way to the transporting vessel to service/repair the Primary scow monitoring system, the scow may be used to transport dredged material while using the Backup system. The Backup system may be used for up to two consecutive placement trips while awaiting contractor personnel to service the equipment. No more than two consecutive trips to ocean placement sites may be made without the Primary scow monitoring equipment/software fully functioning.

j. If radio communication with the scow is lost, preventing operation of radio-controlled scows, placement must not occur until the system is repaired. Voice contact, through radio or direct communication, must be maintained with a scow man, or other personnel, who is riding aboard a scow, for the duration of the placement trip. Scow opening must only occur when a direct, voice command has been given to personnel aboard the scow, or when radio communication with radio-controlled scows is maintained. If the scow's engine can not be operated by the radio-control system, and the scow is boarded to attempt to fix the engine, the scow must be located at the designated placement position if the scow's engine is started. Past use of radio-controlled scows revealed that manually starting a scow's engine after a failed radio-controlled engine start could cause the "scow open" command to be completed, causing the scow to dump at the location of engine startup. Any problems with a radio control system must be fixed prior to subsequent

use of the scow. The NYD Inspector must note on the TPL form any time the radio-controlled scow system malfunctions and manual discharge is required, and immediately notify the Notification List.

k. A primary and backup radio must be onboard all manned scows, along with backup power supplies. Hand signals must never be used to direct the scowman regarding scow opening/closing. All personnel aboard scows, or who may board scows while transporting dredged material, must be informed that discharge of dredged material will only be allowed while voice communication is maintained.

l. To help ensure that dredged material is transported and placed at the HARS in accordance with the guidelines described above, the following checklist has been prepared. Items in the checklist must be reviewed by the NYD Inspector at the dredging site, while underway, and at the HARS. Any item on the checklist that receives a "NO" answer must be reported immediately to the Notification List. If the "NO" answer is related to the scow monitoring equipment and/or software, the scow monitoring contractor must also be notified immediately. These discrepancies must be noted on the TPLF associated with the trip using the letter-number code associated with each item. Each placement trip to the HARS must use a checklist, to be completed by the NYD Inspector working aboard the towing vessel, using the scow monitoring software or by hand. A supplemental report must be filed and faxed to NY District at (212) 264-1463 if space on the TPLF is not sufficient to explain the discrepancy. The first time a "NO" answer occurs, the notification list must be notified. However, if the same item continues to receive "NO" answers, telephone calls should not be made until the problem is corrected, or if more than three additional trips occur without the deficiency being corrected. Checklist copies must be signed and dated by the NYD Inspector and placed in a file. All original, signed checklists associated with this project must be submitted to the NY District on a weekly basis for the duration of the project. Checklists must be hand delivered or mailed to:

U.S. Army Corps of Engineers, NY District  
Dredged Material Management Section  
Room 1937, CENANOP-SD  
26 Federal Plaza  
New York, NY 10278-0090  
Attn: Dr. Stephen C. Knowles

m. Original copies of TPL forms for each trip to the HARS, signed and dated by the NYD Inspector on duty during each trip, must be submitted to the Dredged Material Management Section at the above address at the completion of the project, or after a NYD Inspector has discontinued working as a NYD Inspector on the project, either temporarily or permanently.

n. If the NYD Inspector answers "NO" to any item in Part A, dredged material must not be transported from the dredging site until any discrepancies have been corrected. Only after all requirements have been met, equipment/supplies are operable and available, required information has been supplied, etc., as indicated by the NYD Inspector being able to answer "YES" to all items, is dredged material allowed to be transported from the dredging

site.

o. Two exceptions to this exist: 1) If a backup scow is used, it should be noted on the TPL form, but normal placement can continue. 2) When the the Primary scow monitoring systems are malfunctioning, dredged material may be transported from the dredging site if scow monitoring contractor personnel are onboard to fix/service the equipment, or if the Backup scow monitoring system is functioning. If any of the items in Part A answered "NO" by the NYD Inspector, the Notification List must be contacted immediately, even if contractor personnel are onboard the towing vessel. Telephone numbers of personnel on the Notification List must be supplied to all NYD Inspectors working on the dredging project. Reports of discrepancies or unusual events must also be faxed by the NYD Inspector as soon as possible to (212) 264-1463 and other numbers if required by NY District. Discrepancies must be noted on the TPLF using the code letter/number associated with each item in the lists. A supplemental report must also be faxed if the incident can not be adequately documented on the TPLF.

p. Parts B and C of the checklist pertain to activities/requirements of NYD Inspectors while underway to the designated placement location and at the placement location, respectively. All of these items must be verified by the NYD Inspector aboard the transportation vessel. If any of these items are answered "NO" by the NYD Inspector, the Notification List must be contacted immediately, and any supplemental reporting completed.

#### **PART A. DREDGING SITE (Checklists)**

A1\_\_\_ A legible copy of the permit conditions and guidelines, as related to scow loading, transport, and dredged material placement, is in possession of the NYD Inspector.

A2\_\_\_ A legible copy of the Placement Guidelines and placement grid map received at the pre-construction meeting, or any additional instructions or guidelines as related to scow loading, transport, and dredged material placement, is in possession of the NYD Inspector.

A3\_\_\_ The scow being used to transport the dredged material is mechanically sound, does not leak, and has no visible damage that may cause leaking.

A4\_\_\_ A regularly used scow was used.

A5\_\_\_ A scow loading table for the scow being towed is aboard the towing vessel and available for the NYD Inspector to use.\*

A6\_\_\_ An estimated dredge material density has been provided by the dredging contractor.  
Estimated density is: \_\_\_\_\_

A7\_\_\_ The material being dredged has been observed by the NYD Inspector for general characteristics (grain size, color, consistency). Majority of material is dry/thick/watery, color:\_\_\_\_\_, mud/sand/gravel/rock.

A8\_\_\_ For scows loaded with any rock (rock is defined as any stones greater than 2.5 inches in diameter), the estimated rock percent has been recorded on the TPL form.

A9\_\_ An estimate of the volume of material in the scow has been calculated by the NYD Inspector using the scow loading table and recorded on the TPL form.

A10\_\_ Scow contains less volume of dredged material than the maximum volume allowed for placement during a single trip.

If a scow contains a volume of dredged material greater than the maximum volume allowed for placement during a single trip, the volume must be decreased below the maximum volume before the dredged material can be transported away from the dredge site.

A11\_\_ The scow monitoring systems (Primary and Backup) are fully operational and are functioning.

Any scow monitoring system malfunctions must be reported immediately to the scow monitoring contractor. Tugs are not allowed to leave the dredging site while towing any scows with dredged material if the scow monitoring systems are not fully operational. However, if scow monitoring contractor personnel are onboard the transporting vessel to service the equipment, or in communication with the NYD Inspector via cellphone or radio, or on the way to repair/service the equipment, the vessel may depart from the dredging site while malfunctions are being repaired/corrected. In this case, the Backup scow monitoring system must be used and the scow may be transported from the site. If the Primary scow monitoring system is not functional, the Backup monitoring system may only be used on two consecutive offshore placement trips using an affected scow. No more than two consecutive trips without the Primary monitoring system can ever be made.

A12\_\_ The scow draft pressure value, as displayed by the scow monitoring software, has been recorded on the TPL form. (this value should be noted a few minutes after leaving the dredging site, while being towed, to allow the material in the scow to shift and settle)

A13\_\_ A fathometer is fully operational, functioning, and installed on the transporting vessel.

A14\_\_ A radio onboard the transporting vessel is operable and can receive NOAA marine weather forecasts and ocean conditions.

A15\_\_ Current and forecasted marine weather and ocean conditions at the designated placement location have been monitored on the radio and will allow safe and accurate placement of dredged material. Winds at a reporting station closest to the placement location are presently blowing \_\_\_\_\_ from the \_\_\_\_, with \_\_\_\_\_ ft seas. Winds forecast for the placement location are \_\_\_\_\_ from the \_\_\_\_, with \_\_\_\_\_ seas.

A16\_\_ DGPS navigation system is fully operational, functioning, and installed aboard the transporting vessel.

A17\_\_ A radar system is fully operational, functioning, and installed aboard the transporting vessel.

A18\_\_ Radio-control system for scow operation (if scowman is not used) is fully operational and functioning.

A19\_\_ Radio and backup radio system, for communication between scows and towing vessels, are aboard scow (if scowman is used), and are fully operational and functioning.

A20\_\_ Hand-held laser range finder, manufactured no earlier than 1998, with at least a 1000 foot range, is aboard towing vessel, fully operational and functioning, and available for NYD Inspector use, along with a set of backup batteries.

A21\_\_ A fully operable cell phone that can send and receive calls is in the possession of the NYD Inspector onboard the towing vessel.

A22\_\_ A protractor is available for use by the NYD Inspector aboard the towing vessel.

A23\_\_ A pair of dividers, for map/chart distance scaling, is available for use by the NYD Inspector aboard the towing vessel.

A24\_\_ An up-to-date nautical chart that includes the placement area is available for use by the NYD Inspector.

A25\_\_ NYD Inspector is provided full access to fathometer, radar, vessel DGPS, and any other equipment/information necessary to conduct NYD Inspector duties.

A26\_\_ A digital photograph has been taken of the loaded scow such that the level and characteristics of material within the scow can be determined from the photograph.

A27\_\_ The digital photograph has been downloaded into the scow monitoring system for inclusion with the Transportation and Placement Log form

A28\_\_ The satellite, vessel tracking system on the tug is present and operable.

A29\_\_ The digital photograph of the scow has been downloaded into the scow monitoring software.

A30\_\_ Full compliance with any other contract or regulatory requirements related to dredged material placement has been met.

A31\_\_ Time of departure from dredging site has been recorded on the TPL form.

A32\_\_ All other information relative to the dredging site has been entered into the TPL form.

A33\_\_ The NY District Inspector activated the scow monitoring software at the dredging site

A34\_\_ The NY District Inspector was present at the dredging site to complete all items in this section of the checklist

\* Scow loading tables for each scow used on a dredging project must be provided to the NYD Inspectors working on the project. NYD Inspectors must be provided an estimated dredged material density by the dredging contractor for each loaded scow. The dredged material density and scow draft must be used by the NYD Inspectors to estimate the volume of dredged material in each scow at the start of each trip to the designated dredged material placement location. This estimated volume must be recorded on the USACE Transportation and Placement Log (TPL) form.

**PART B . ENROUTE TO THE PLACEMENT LOCATION (Checklists)**

B1\_\_ scow pressure/draft from the scow monitoring system has been recorded on the TPL form thirty minutes after leaving the dredging site.

B2\_\_ Scow draft is being monitored with scow monitoring software to detect sudden or gradual changes in draft.

B3\_\_ If the NYD Inspector is also a NMFS certified marine mammal/endangered species observer, observation and appropriate reporting is conducted.

B4\_\_ Scow draft pressure varies less than 20 points, or 1.5 feet of draft, from the value at the dredge site.

B5\_\_ A gradual increase or decrease in scow draft pressure values, exceeding 12 points (or actual scow draft of more than 1 foot) is not observed.

B6\_\_ Scow does not appear to be listing.

B7\_\_ Water behind scow has been observed, if possible, to ensure that no turbid water plumes are present.

B8\_\_ A fixed reference position, such as a channel marker, has been used to ensure that the towing vessel DGPS and scow DGPS positions agree.

B9\_\_ Marine weather and sea conditions present and forecast to be present at the placement location are periodically monitored. The NYD Inspector and towing vessel captain may decide to return to the dredging site based on an updated marine forecast.

**PART C. IN THE VICINITY OF THE PLACEMENT LOCATION (HARS AND/OR REEF)**

For artificial reef placement:

C1\_\_\_ Water depths were continuously monitored (a reading taken at least every 5 seconds) with the towing vessel fathometer while navigating anywhere within the reef boundary.(towing vessel crew must also monitor water depths)

C2\_\_\_ All water depths observed anywhere within the reef boundary were at least 15 feet deeper than the permitted water depth at the reef.

If any depths less than or equal to 15 feet deeper than the permitted reef depth, or other depth specified by NY District, are observed anywhere at the reef site, using the towing vessel fathometer, the incident must be reported immediately to the Notification List, and the Artificial Reef manager, and all areas within 200 feet of the shallower water must not be used for placement of dredged material. Other vessels used for transportation of dredged rock must be notified of the observation, provided coordinates, and instructed not to place additional rock closer than 200 feet of the reported position. Anytime depths within 15 feet of the permitted reef depth, or other specified depth, are noted by observing a fathometer while traversing a reef site, the geographic coordinates and depths must be recorded and reported, even if the same locations were previously noted and reported.

C3\_\_\_ If depths less than or equal to 15 feet deeper than the permitted reef depth, or other specified depth, are observed anywhere in the reef, the latitude, longitude and depth has been recorded.

LATITUDE \_\_\_\_\_ LONGITUDE \_\_\_\_\_ DEPTH \_\_\_\_\_

For all ocean placement locations:

C4\_\_\_ Scow radio control equipment operates without any problems.

C5\_\_\_ Placement occurred in correct grid cell and was coordinated with towing vessel crew.

C6\_\_\_ Scow draft information immediately prior to scow door opening has been recorded on the TPL form.

C7\_\_\_ TPL form was completed using the scow monitoring software, or by hand if the software malfunctions, within 30 minutes of scow door opening.

C8\_\_\_ Scow monitoring equipment, transportation vessel navigation equipment, and all other equipment related to placement of dredged material worked without any problems.

C9\_\_\_ All activities associated with placement of dredged materials appeared to be conducted in a safe manner.



C10\_\_ Nothing occurred that may have resulted in incorrect placement of dredged material.

C12\_\_ TPL form and any supplemental reports faxed to (212) 264-1463 within 2 hours of scow door, or hopper bin, opening.

C13\_\_ For reef placement, TPL form also faxed to the applicable State Artificial Reef coordinator within 8 hours of scow door opening.

C14\_\_ A copy of the TPL form has been signed by the NYD Inspector and placed in a file/folder to become part of the permanent record of the trip. All signed TPL forms must be submitted to NY District when offshore transport of dredged material associated with the project ends, or when the NYD Inspector finishes working on the project.

\* Scow loading tables for each scow used on a dredging project must be provided to the NYD Inspectors working on the project. NYD Inspectors must be provided an estimated dredged material density by the dredging contractor for each loaded scow. The dredged material density and scow draft must be used by the NYD Inspectors to estimate the volume of dredged material in each scow at the start of each trip to the designated dredged material placement location. This estimated volume must be recorded on the USACE Transportation and Placement Log (TPL) form.

-- End of Section --

(End of Summary of Changes)